## (19) World Intellectual Property Organization International Bureau



## 

(43) International Publication Date 18 November 2004 (18.11.2004)

PCT

(10) International Publication Number WO 2004/098491 A2

(51) International Patent Classification7:

A61K

(21) International Application Number:

PCT/US2003/034523

(22) International Filing Date: 31 October 2003 (31.10.2003)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/422,964

1 November 2002 (01.11.2002) US

(71) Applicant (for all designated States except US): THE GOVERNMENT OF THE UNITED STATES OF AMERICA AS REPRESENTED BY THE SECRETARY OF THE DEPARTMENT OF HEALTH AND HUMAN SERVICES [US/US]; National Institutes of Health, Office of Technology Transfer, 6011 Executive Boulevard, Suite 325, Rockville, MD 20852-3804 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): KLINMAN, Dennis, M. [US/US]; 2 Candlelight Court, Potomac, MD 20854 (US). IVINS, Bruce [US/US]; 622 Military Road, Frederick, MD 21702-8243 (US). VERTHELYI, Daniela [US/US]; 11615 Regency Drive, Potomac, MD 20854 (US).

(74) Agent: SIEGEL, Susan, Alpert; Klarquist Sparkman, LLP, One World Trade Center, Suite 1600, 121 SW Salmon Street, Portland, OR 97204 (US).

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

## Declaration under Rule 4.17:

- of inventorship (Rule 4.17(iv)) for US only

## Published:

 without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHOD OF PREVENTING INFECTIONS FROM BIOTERRORISM AGENTS WITH IMMUNOSTIMULATORY CPG OLIGONUCLEOTIDES

(57) Abstract: The present disclosure relates to a method of preventing or treating an infection caused by a bioterrorism agent, specifically to a method of increasing an immune response to a bioterrorism agent using an oligodeoxynucleotide including a CpG motif, and a method of enhancing the immunogenicity of a vaccine against a bioterrorism agent using an oligodeoxynucleotide including a CpG motif.

